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FISHER, Richard P.

14. (Cancelled).

15. (Cancelled).

16. (Original) A media positioning and printing system comprising:

a printhead assembly having a printhead;

a controller for controlling firing of the printhead;

a label media to be printed to by the firing of the printhead; and

an encoder system in operational association with the printhead assembly, the encoder system including an encoder shaft having an encoder traction roller securably attached to the encoder shaft, the label media riding along the encoder traction roller, and an encoder attached to the encoder shaft for monitoring the rotation of the encoder shaft and transmitting a signal to the controller, the encoder including an optical source, an optical detector and a reflective optical disk that rotates with the encoder shaft, the reflective optical disk having a reflective pattern, the optical source generating an optical signal, and the reflective optical disk reflecting the optical signal back to the optical detector, the reflective pattern having non-reflective spaces, the optical detector not receiving a reflected optical signal when the optical signal hits the non-reflective spaces of the optical disk, thereby interrupting the optical signal;

wherein, when the encoder shaft rotates, the encoder optical signal is alternately reflected and interrupted so as create a signal interruption, and when the optical signal is interrupted, each resulting signal interruption corresponding to a label media travel distance, the encoder sends a signal to the controller and the controller, based on the signal from the encoder, sends a firing signal to the printhead to fire the printhead in order to effect printing of the label media based on the label media travel distance.

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17. (Original) The system of claim 16 wherein the label media travel distance is approximately 1/300th of an inch.

18. (Original) The system of claim 16 wherein the encoder is a rotary-to-digital encoder.

19. (Original) The system of claim 16 wherein the rotation of the encoder shaft corresponds to an angular displacement that is read by the encoder and translated into a digital signal that is sent to the controller.

20-28 (Withdrawn).